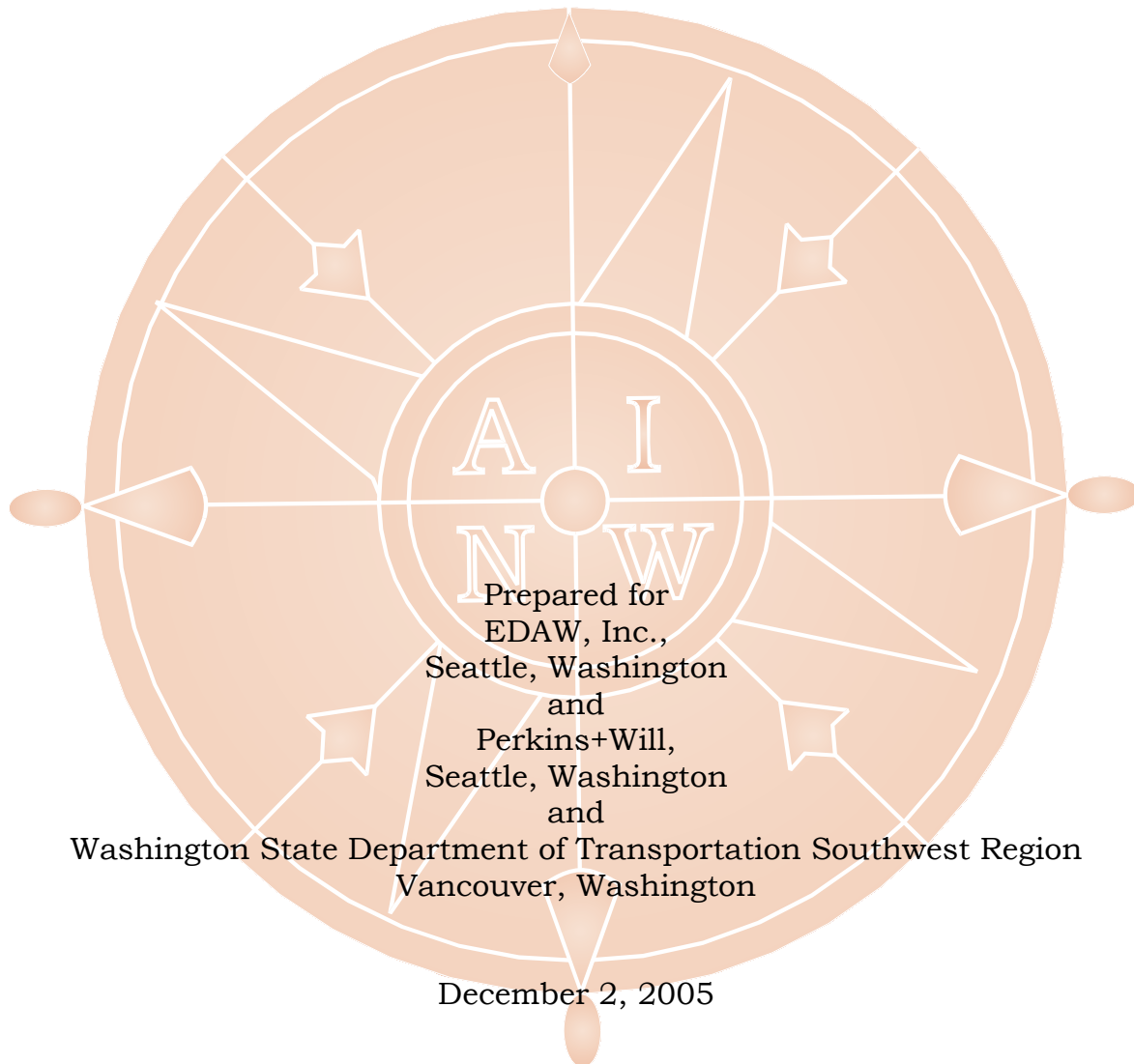


**CULTURAL RESOURCE SURVEY FOR THE
CLARK'S DISMAL NITCH SAFETY REST AREA MASTER PLAN,
PACIFIC COUNTY, WASHINGTON**



REPORT NO. 1580

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PACIFIC COUNTY, WASHINGTON**

PROJECT: Clark's Dismal Nitch Safety Rest Area Master Plan

TYPE: Survey

LOCATION: NE ¼, SE ¼, and SW ¼ of Section 24 of Township 9 North, Range 10 West,
Willamette Meridian.

USGS QUAD: Astoria, Oreg.-Wash. 7.5', 1949, Photorevised 1984
Knappton, Wash.-Oreg. 7.5', 1949, Photorevised 1984

**TOTAL PROJECT/
ACRES SURVEYED:** 4.5 acres

COUNTY: Pacific

FINDINGS: Historic pilings were recorded.
No significant historic buildings or structures were identified.

PREPARERS: Nicholas J. Smits, M.A., R.P.A., Supervising Archaeologist,
Judith A. Chapman, M.A., Senior Archaeologist/Architectural Historian,
Jo Reese, M.A., R.P.A., Senior Archaeologist

FIELD NOTES: AINW, Portland

EXECUTIVE SUMMARY AND INTRODUCTION

Archaeological Investigations Northwest, Inc. (AINW), has completed a cultural resource survey for a Master Plan of the Clark's Dismal Nitch (formerly Megler) Safety Rest Area (SRA) in Pacific County, Washington. Owned and operated by the Washington Department of Transportation (WSDOT), the SRA is also situated within the larger boundary of the Clark's Dismal Nitch Unit of the Lewis and Clark National Historical Park, managed by the National Park Service (NPS). A Master Plan is being cooperatively developed in order to upgrade the SRA to meet current standards. Short-term implementation of the Master Plan will involve drilling a water well, installing a septic drain field, replacing the existing restroom/information building, and creating trails, view points, and interpretive displays. Long-term implementation will involve additional improvements to the property.

As the lead agency for the project, the Federal Highway Administration is responsible for project compliance with the National Environmental Policy Act (NEPA). The WSDOT is the administrator for funding, federal compliance, and on-site maintenance and operations of the SRA and the State Route (SR) 401 right-of-way. The NPS will be the landowner and manager of the property outside of both the SRA boundary and the highway right-of-way. The Washington State Historical Society (WSHS) is managing the design phase of the project and is providing financial support for the project; and the Washington Department of General Administration,

Division of Engineering and Architectural Services, is the lead agency for construction management on behalf of the WSHS.

AINW was subcontracted through EDAW, Inc., a landscape architecture, planning, and environmental firm, and Perkins+Will, an architectural design and planning company, to conduct a cultural resource study for the Clark's Dismal Nitch SRA Master Plan. AINW has completed a literature review, a pedestrian archaeological survey, and subsurface shovel testing within the project Area of Potential Effect (APE), where construction impacts may occur. Because the project is a federal undertaking, the study was designed to address the proposed project's impacts on significant cultural resources and to provide information needed for a NEPA submittal. AINW's work was also done in compliance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations (36 CFR 800), and according to the requirements of the Secretary of the Interior's Standards and Guidelines for archaeology and historic preservation.

As part of the Lewis and Clark National Historical Park, the Clark's Dismal Nitch SRA will provide visitors with information regarding the history of the Chinook Tribe, local history, and Lewis and Clark's Corps of Discovery, emphasizing the four days the Corps spent at the Dismal Nitch in November of 1805. It was William Clark who gave the place its moniker, referring to the dismal days and nights the exploration party spent in a small cove in the cliffs along the Columbia River shoreline. Since that time, the landscape has been dramatically altered by cutting and filling operations associated with construction of a railroad in 1907, a ferry landing and road in 1927, a highway in 1956, and the modern SRA in 1968. Although the steep terrain north of the SRA remains undeveloped, the shoreline itself has changed dramatically, and the actual "nitch" to which Clark referred has been dramatically altered.

No pre-contact Native American archaeological resources were identified during the survey, nor did AINW identify any locations considered to have a high probability for such resources. No historic buildings or structures are located within the project APE. The concrete restroom/information building at the SRA was constructed in 1969 and is not historic. An alignment of pilings that had been part of a fish receiving station may be incorporated into the western end of the project area. The pilings were recorded by AINW, although their presence beneath the fill within the APE has not been verified. If there, the pilings would lack integrity and are recommended to be not eligible for listing in the National Register of Historic Places (NRHP). A determination of "no historic properties affected" is recommended for the project.

PROJECT DESCRIPTION AND SETTING

The Clark's Dismal Nitch SRA is located on the north shore of the Columbia River, approximately 16 kilometers (km) (10 miles [mi]) east of where the river meets the Pacific Ocean, in southern Pacific County, Washington (Figures 1 through 4). The SRA itself is located on the south side of SR 401 at Milepost 1.0, approximately 1.6 km (1.0 mi) northeast of the north end of the US 101 Astoria-Megler Bridge. In the vicinity of the project area, the general contour of the shoreline is created by steep southeast-trending ridges that jut out into the water, forming a series of bays, coves, and points. A thin strip of artificial land follows the southern base of these ridges, creating the modern shoreline occupied by SR 401 and the Clark's Dismal Nitch SRA.

The 3.7-acre SRA is bordered by SR 401 on the north and the Columbia River on the south, east, and west. At the west end of the project area, Megler Creek flows south into the Columbia River at Megler Cove. The terrain immediately north of SR 401 is comprised of steep ridge slopes and cliffs, the tops of which tower 168 meters (m) (550 feet [ft]) above mean sea

level. Cuts are visible in the slopes above SR 401, indicating where the large south/southwest ridge was truncated during construction of the railroad in 1908. The end of this ridge, which has been dramatically altered, would have provided the “nitch” where Lewis and Clark camped in 1805.

The purpose of the Clark’s Dismal Nitch SRA Master Plan is to upgrade the existing rest area to meet current standards. The SRA is approximately 3.7 acres and follows the shoreline of the Columbia River for a distance of approximately 483 m (1,584 ft); at the west end, the SRA is 61 m (200 ft) wide, and at the east end it tapers into SR 401 (Figures 1 through 4). Several proposed Master Plan options for improving the SRA include replacing the existing restroom/information building and creating trails, viewpoints, and interpretive displays. Long-term implementation of the Master Plan may include additional improvements.

Short-term implementation of the Master Plan will involve installing a new septic drain field on the north side of SR 401, across the highway from the eastern end of the SRA. The proposed drain field area measures approximately 136x15 m (450x50 ft). A new well will be drilled approximately 396 m (1,300 ft) west of the western boundary of the SRA, in the steep hills north of the river. Drilling equipment will access the site from SR 401 via an existing gravel road. A new pipe will be installed beneath the gravel road for a distance of approximately 213 m (700 ft), connecting the new well to the existing water line that runs beneath the SR 401 right-of-way on the north side of the highway.

The Area of Potential Effect (APE) for the project was defined as those areas in which construction impacts may occur. These areas include the SRA, the proposed septic drain field location, and the proposed well and water line locations (Figures 1 and 2). The western boundary of the APE for the SRA is marked by the culvert through which Megler Creek flows beneath SR 401. The culvert is outside of the APE. All of the property south of SR 401 that is above the normal high water line and east of the cove, is included in the SRA APE; the riprap surrounding the outer portions of the SRA was used as the APE boundary. Also included in AINW’s literature review, but not included in the project APE, is the private land north of the SRA (Figure 2). The land is currently owned by Cathlamet Timber Company; however, negotiations are underway for the NPS to acquire the land.

The land north and west of the SRA remains undeveloped save for the many logging roads used to access the area’s timber resources. Historically, the general project area lies within the Sitka spruce (*Picea sitchensis*) vegetational zone, characterized by dense stands of Sitka spruce, Western hemlock, Western redcedar, and Douglas-fir trees with lush understories of ferns and shrubs (Franklin and Dyrness 1988). Minor tree species include Pacific silver fir, grand fir, and bigleaf maple. Red alder trees are common in recently disturbed areas (Franklin and Dyrness 1988). Aerial photographs indicate that the land north of SR 401 has been logged multiple times since 1907.

Soils within the project area consist of three varieties of silt loam. On the hill slopes north of SR 401, the native soil is Knappton silt loam, characterized by deep, well-drained soil that formed in colluvium derived from basalt (Pringle 1986). Soil within the SRA consists of Hoquiam silt loam that was imported as fill in the early twentieth century. In undisturbed contexts, Hoquiam silt is characterized by deep, well-drained soil on moraine uplands that formed in old alluvium deposited over glacial drift (Pringle 1986). Finally, the soil immediately surrounding the mouth of Megler Creek is Nuby silt loam, characterized by deep, poorly-drained soil found on floodplains (Pringle 1986).

CULTURAL CONTEXT

Native Peoples

The Clark's Dismal Nitch project area is located within the traditional territory of the Lower Chinookan people (Ray 1938:37; Ruby and Brown 1976:5; Silverstein 1990:533-534). Through common usage, the term *Chinook* has come to refer to all speakers of the Chinook language family who inhabited the territory from the mouth of the Columbia River upstream to The Dalles and along the lower Willamette River to present-day Oregon City (Silverstein 1990:533). This large language family is divided into the Upper and Lower Chinook dialects, and within the Lower Chinook dialect are speakers of Chinook proper and Clatsop-speakers. Historically, the term *Chinook*, as used by early Euroamerican explorers, referred to the people who spoke Chinook proper and lived on the north shore of the Columbia River near its mouth (Silverstein 1990:533).

Lower Chinookan subsistence strategy was oriented toward the procurement of abundant, seasonally available food resources. Chinook summer villages and field camps were situated along the north shore of the Columbia River between Gray's Bay and Cape Disappointment, with clusters of villages on Baker's Bay near present-day Ilwaco (Ruby and Brown 1976:6; Silverstein 1990:533-534). Seasonal runs of sturgeon, steelhead trout, eulachon, herring, and five species of salmon provided fresh fish and were also smoke-dried and stored for the winter months (Silverstein 1990:536). At times other than the heaviest fishing season of late spring to summer, the Chinook hunted large and small game for food and for hides, out of which clothing was made (Silverstein 1990:536). Temporary summer dwellings consisted of light framework structures with cattail mat sides and possibly cedar bark roofs. Winter villages were primarily established on the protected shores of Willapa Bay, and consisted of oblong, gable-roofed houses made from vertical cedar planks (Silverstein 1990:536-538).

Of the many Chinook villages along the north shore of the Columbia River, two known summer villages were located in the vicinity of the Dismal Nitch (National Park Service 2003). Approximately 2.0 km (1.25 mi) southwest of the Dismal Nitch was *Qaiłtsiuk* (later called Chinookville or Chenook), just west of present-day Point Ellice. Farther downstream was *Qiqawaqilxam* (later called Middle Town) located about 4.0 km (2.5 mi) west of the current project area (National Park Service 2003).

Economic and political ties among Lower Chinook villages were maintained by exchanging goods and by forming alliances through intermarriage. Chinook society was stratified, and the personal accumulation of goods and slaves afforded prestige to certain members of the community. The Lower Chinook were known for their canoe-building prowess, and these vessels helped them establish their reputation as traders well before Europeans set eyes on the region (Ruby and Brown 1976:6).

The Lower Chinook were first described in writing by Captain Robert Gray, who sailed into the mouth of the Columbia River in 1792, and by Captain George Vancouver, who also sailed into the area that year (Silverstein 1990:535). Maritime fur traders established trade relations with the Lower Chinook, and by the time Lewis and Clark descended the river in the fall of 1805, the presence of Europeans on the lower Columbia River was not uncommon. The Lower Chinook took advantage of their geographic location by trading furs for a wide variety of European goods. Lewis and Clark listed some of the Chinooks' possessions, including guns, powder, balls, shot, copper and brass kettles, brass teakettles and coffeepots, blankets, cloth, plates, pieces of copper and brass, wire, knives, beads, tobacco, fishhooks, buttons, and sailors' clothing. These interactions with European explorers allowed the Lower Chinook to

become immediately wealthy, giving them greater economic independence and allowing them to control trade with their native neighbors (Ruby and Brown 1976:19). Ultimately, however, their trade relationship with Europeans caused dramatic population losses due to exposure to Old World diseases, particularly smallpox (Silverstein 1990:535-536).

In 1851, a series of treaties was negotiated that included the Lower Chinook; however, none of the treaties was ratified by Congress. By the mid-nineteenth century, many Chinook villages had been abandoned, and by the latter part of the century the majority of survivors had consolidated with survivors of other native groups (Silverstein 1990:535).

Today, the Chinook Indian Nation is made up of five separate tribes, including the Chinook, the Willapa, the Clatsop, the Kathlamets, and the Wahkiakum. All five tribes are Chinookan speakers. According to Tony Johnson, Chairman of the Chinook Indian Tribe's Cultural Committee, Chinook tribal members gather grass in the vicinity of the SRA, both upstream and downstream from the project area (personal communication 2005). The grass is used for making baskets. Gary Johnson, Tribal Chairman, pointed out the presence of significant archaeological sites both upstream and downstream of the Clark's Dismal Nitch SRA, but none within the project area (personal communication 2005).

Euroamerican History

In August of 1775, Spanish explorer Bruno Heceta was the first European to view the mouth of the Columbia River, which he named "Assumption Bay" (McDonald 1966:6). The cape north of the mouth he named "San Roque." Three years later, with Heceta's maps in hand, British trader John Meares set out to prove or disprove the existence of a "River San Roque." Meares, who did not sail into the river's mouth due to high swells, became convinced that no river existed, and thus "San Roque" was renamed "Cape Disappointment" (McDonald 1966:10).

It was not until 1792 that the Columbia River's existence was confirmed by Europeans. In that year, American Robert Gray anchored about 16 km (10 mi) upriver from the mouth and named the river after his ship, the *Columbia Rediviva* (Franchère 1954:58 [1854]; McDonald 1966:10). Gray also renamed Cape Disappointment "Cape Hancock," but the change never caught on. Gray's Bay is named after the American trader.

Lewis and Clark Corps of Discovery

In 1803, Thomas Jefferson dispatched Captains Meriwether Lewis and William Clark to lead the Corps of Discovery on a mission to find a water route across North America and explore the natural resources of the uncharted American West. The expedition was organized in Saint Louis in the spring of 1804 and journeyed up the Missouri River to winter among the Mandan in Montana. In the autumn of 1805, after a year and a half of arduous wilderness travel through the Great Plains and over the Rocky Mountains, the expedition found themselves surrounded by the Cascade Mountains deep within the Columbia River Gorge on their way to the Pacific Ocean. Little did Lewis and Clark realize that the time they would spend on the shores of the lower Columbia River would be counted among the most discouraging, dangerous, and disagreeable experiences faced during their expedition (Ziak 2002).

About a mile below the Cascade Mountains, the Corps saw the river gently broaden, allowing the party to travel thirty miles per day (Moulton 1990). As they drew closer to the Columbia's mouth, however, the river became wide and often treacherous, with conditions hinging on tides and weather. One of the expedition's five canoes, purchased from native

people near Celilo Falls, was a lightweight vessel specifically meant for travel through high waves; however, the party's other four canoes were 38-foot-long, rough-hewn dugouts, making travel difficult in the rough water. The party proceeded downriver, tormented by high winds, drenching rains, penetrating cold, and white-capped waves. They arrived at Gray's Bay, in full view of the river's estuary, where they spent the nights of November 8th and 9th (Moulton 1990:37-38).

On November 10th, as the party paddled past Grays Point, they saw that the steep, forested shoreline consisted of a series of coves, or "niches," each divided from the next by a small point of land. They passed present-day Dismal Nitch (also known as Megler Cove), but as the weather again worsened, the party retreated to a sheltered cove upriver from the Dismal Nitch (approximately 183 m (600 ft) north/northeast of the eastern end of the modern SRA); they did not notice Dismal Nitch at the time because of foul weather and dense piles of driftwood (Moulton 1990:39,42; Plamondon 2004:65). At this point in the trip, Lewis was not keeping a journal; however, Clark was penning entries each day in two separate journals. Clark (Moulton 1990:39) describes the unnamed cove as:

a Small Bay on Driftwood, on which we had also to make our fires to dry our Selves as well as we could the Shore being either a Clift of Purpendicular rocks or Steep assents to the hight of 4 or 500 feet.

Realizing the risk of remaining exposed in such a place, the men attempted to round the small point of land in an effort to find a better harbor (Moulton 1990:39). However, the rough water again thwarted their progress, and the party:

Formed a Campment on Drift logs in the Same little Bay under a high hill at the enterence of a Small drean which we found verry convt. On account of its water, as that of the river is Brackish – The logs on which we lie is all on flote every high tide – The rain Continud all day– we are all wet, also our beding and many other articles. we are all employed until late drying our bedding. nothing to eat but Pounded fish.

Rain soaked the expedition party that night, and it continued at intervals throughout the next day, November 11th. Clark (Moulton 1990:40) notes that around noon:

five Indians Came down in a Canoe loaded with fish of the Salmon Spes. Called Red Charr, we purchased of those Indians 13 of these fish, for which we gave fishing hooks & some trifling things. . . they are on their way to trade those fish with white people which they make Signs live below round a point. . . the Indians left us and Crossed the river which is about 5 miles wide through the highest Sees I ever Saw a Small vestle ride, their Canoe is Small maney times they were out of Sight before they were 2 miles off Certain it is that they are the best canoe navigators I ever Saw.

While the party waited anxiously for the weather to improve, the incessant rain saturated the hillside and sent loose rocks cascading down the slope into their camp. They hunkered down, scattering themselves on giant drifting tree trunks and crevices in the rocks (Moulton 1990:42).

Conditions worsened on November 12th; on top of rain, wind, and cold came thunder, lightning, and hail. Clark (Moulton 1990:42) describes their move from the unnamed cove to the Dismal Nitch:

As our situation became Seriously dangerous, we took the advantage of a low tide & moved our Camp around a point a Short distance to a Small wet bottom at the mouth of a Small Creek [Megler Creek], which we had not observed when we first Came to this Cove, from its being very thick and obscured by drift trees & thick bushes, Send out men to hunt they found the woods So thick with Pine & [decay?] timber and under groth that they could not get through, Saw Some Elk tracks, I walked up this creek & killed 2 Salmon trout, the men killd. 13 of the Salmon Species. The Pine of fur Specs, or Spruc Pine grow here to an emense Size & hight maney of them 7 & 8 feet through and upwards of 200 feet high. It would be distressing to a feeling person to See our Situation at this time all wet and cold with our bedding &c. also wet, in a Cove Scercely large nough to Contain us, our Baggage in a Small holler about ½ a mile from us, and Canoes at the mercy of the waves & drift wood, we have Scured them as well as it is possible by sinking and wateing them down with Stones to prevent the emence [waves] dashing them to pices against the rocks. . . our party has been wet for [seven six] 8 days and is truly disagreeable, their robes & leather Clothes are rotten from being Continually wet, and they are not in a Situation to get others, and we are not in a Situation to restore them.

The party spent the night in what came to be known as the Dismal Nitch (Figure 5). As the rain continued through the morning of November 13th, Clark hiked up Megler Creek and climbed to the top of a steep ridge in an effort to better assess their physical situation. However, the clouds and rain obscured his view, and Clark was unable to see beyond his immediate surroundings (Moulton 1990:44). Upon his return to camp, the captains sent three men downstream in “the Indian canoe” to round Point Ellice, and find a better place for the party to camp. The three men did not return that evening. Meanwhile, the miserable conditions continued in the Dismal Nitch (Moulton 1990:44):

The Tides at every flud come in with great Swells & Breake against the rocks & Drift trees with great fury—the rain Continue all the evening nothing to eate but Pounded fish which we have as a reserve See Store, and what Pore fish we can kill up the branch on which we are encamped.

On the morning of November 14th, following a night of uninterrupted rain, the party found that one of their canoes had been broken during high tide, dashed against the rocks by the waves. Later in the morning, three Wahkiakum men and two women landed at the camp, the men motioning that they had seen the three Americans sent out the day before. At this time, one of the three men, Colter, returned to camp by land, claiming that the five Indians had taken his gig and basket. Clark called to the Indians to give back the items, which they eventually did when another man pointed a rifle in their direction (Moulton 1990:46-47).

After the Indians left, Colter informed Lewis and Clark that he had found a gravelly beach and two Indian villages on the west side of Point Ellice. Lewis selected nine men and set out with two canoes to round the point. Several hours later, five of the men returned upriver in a canoe half full of water from the high waves, having left Lewis and the other four men at a place they called Station Camp, near a large Indian village (Qiqawaqilxam). Clark (Moulton 1990:47) was anxious to move the remaining party out of the small cove:

The rain &c. which has continued without a longer intermition than 2 hours at a time for ten days past has distroyd. the robes and rotted [a great maney] nearly one half of the fiew Clothes the party has, perticularley the leather Clothes,—fortunately for us we have no very Cold weather as yet and if we have Cold

weather before we Can kill & Dress Skins for Clothing [we] the bulk of the party will Suffer verry much.

The next morning, November 15th, Clark awoke to calm weather for the first time in ten days. He ordered the men to load the canoes, but a sudden wind and high waves prevented him from rounding the point on a test run in an empty canoe. The sun shone until about one o'clock in the afternoon, which gave the men an opportunity to dry some of their gear and clean and examine their firearms. Finally, Clark describes the party's escape from what came to be known as the Dismal Nitch:

About 3 oClock the wind lulled and the river became calm, [we] I had the canoes loaded in great haste and Set Out, from this dismal nitich where we have been confined for 6 days passed [they spent four days at Dismal Nitch itself], without the possibility of proceeding on, returning to a better Situation, or get out to hunt, Scerce of Provisions, and torents of rain poreing on us all the time— proceeded on passed the blustering point below which I found a butifull Sand beech thro which runs a Small [river from the hills?] below the mouth of this Stream is a village of 36 houses uninhabited by anything except flees (Moulton 1990:49-50).

The party remained at Station Camp for ten days. Although they had expected to encounter fur traders, no Euroamericans were ever seen during the time they spent near the mouth of the Columbia River. A vote was taken at Station Camp, and the party decided to paddle to the south shore of the Columbia River, where they would spend the winter before beginning their long journey home (Moulton 1990:85).

Initial Euroamerican Settlement

In 1811, only five years after Lewis and Clark returned east, some members of John Jacob Astor's Pacific Company wanted to establish a settlement in the area of today's Fort Canby, on the north shore of the Columbia River. Ultimately, the Astor party chose a location further upstream on the south side of the river, where the city of Astoria now stands.

Missionaries followed quickly on the heels of the fur trade; Catholic Fathers DeSmet and Blanchett visited Chinookville in 1831 (Lucero and Hobbs 2004:35). The missionaries converted many Chinook Indians to the Catholic faith, and in 1848 Father Lionnet received a mission land grant to establish Stella Maris, the "Star of the Sea" at the Indian village of *Qaiiltsiuk*, which later became Chinookville (Lucero and Hobbs 2004:35).

In 1840, the Hudson's Bay Company opened a trading store in *Qaiiltsiuk* (McDonald 1966:37). The town became Chinookville when it was surveyed and platted by Washington Hall in 1850. Hall had filed a Donation Land Claim (DLC) in 1849 and attempted to drive out the village's native inhabitants so that he could sell the land to incoming settlers (Lucero and Hobbs 2004:36). By 1851, Hall was so despised by the Chinook that they refused to enter into treaty negotiations unless his removal from the area was stipulated in the treaty itself (McDonald 1966:56). The treaty was never ratified, however, and Hall stayed. By 1855, Hall had deeded all of his property to his four-year-old son and two-year-old daughter so that debt collectors would find records showing he owned no property. However, as legal guardian of his children, Hall continued to sell lots under their names until he left the territory in 1862 (Lucero and Hobbs 2004:36). Despite his absence, the 1890 and 1896 General Land Office (GLO) maps of Township 9 North, Range 10 East show Washington Hall's DLC still in his name. The eastern boundary of Hall's claim was located 0.8 km (0.5 mi) west of the current project area.

Fisheries and Salmon Canning

The fishing industry seemed inexhaustible in the first half of the nineteenth century, a period when harvesting was not intensive and commercial ventures remained small in scale. Although the Chinook sold choice salmon to explorers and settlers, the initial attempts by Euroamericans to market salted salmon to Hawaii, the Atlantic Coast, and Europe proved somewhat unsuccessful due to spoilage. The arrival of the Hapgood, Hume and Company salmon canners on the Columbia River, who introduced the salmon canning process in 1866, changed the struggling industry. The canning process allowed for long-distance transportation of fish at inexpensive prices, which opened a broad market for salmon. Salmon quickly became popular in many parts of the world, and salmon canners made fortunes on their ventures. By 1883, more than 50 canneries were operating on the lower Columbia River (Mighetto and Ebel 1994).

Astoria, in its prime position at the river's mouth, became the center of canning operations. Chinese laborers were used in the canning process, but the fishermen who supplied the canneries were usually recent European immigrants. Fishing was a major business on this part of the river, and was performed principally by gillnetting, although trapping, seining, and trolling were also effective. Gillnetting was most prevalent in the late 1800s and consisted of small, sail-powered gillnet boats with 16-foot-high masts and nets made from linen webbing. Early photographs of lower Columbia River fishers show butterfly gillnet boats plying the waters near the Dismal Nitch. Between 1880 and 1892, gillnetters brought in half of the total catch of salmon compared to seining and trapping, but by the 1930s the number of gillnetters on the water had declined substantially (Lucero and Hobbs 2004:117-118).

Fish traps were widely employed on the river and consisted of stationary devices with mesh webbing strung between posts driven into the river bottom. The traps exploited the salmon's tendency to swim upstream, guiding the fish through leads and trapping them in the webbing. By the 1920s, more than 400 traps were operating on the Columbia River. Although gillnetting and trapping were often performed by individuals, seining operations involved crews of 20 to 40 men handling large nets to trap and gather fish at low tide (Mighetto and Ebel 1994).

Joseph G. Megler operated both a cannery and a fish buying station near Point Ellice in the 1870s and 1880s and gave his name to the area. Megler was born in Germany in 1839 and moved to New York as a child to live with his uncle after his parents died. In New York, he studied to become a tinsmith before volunteering for service during the Civil War. After the war, he moved to Astoria to help his brother's hotel business—and ideally to make his fortune in the tinsmithing business. He married Nellie L. Smith in 1873; she was a former bookkeeper from North Brookfield in Massachusetts. Later in his career, Megler was a state legislator for Pacific and Wahkiakum counties for 22 years (Appelo 1966:3-7).

Soon after he arrived in Astoria, Megler was immediately attracted to the salmon canning industry and became the business manager for a small cannery at the east end of Chinookville, on the west side of Point Ellice. In 1853, Patrick J. McGowan purchased a 320-acre land claim from the Catholic Church, adjacent to Washington Hall's claim. McGowan established the McGowan fishery as a salt-packing salmon plant around 1861, which became a salmon canning operation in 1884. His cannery survived until 1947, when it was considered the oldest fish processing plant in the state (Appelo 1966:6; McDonald 1966:69-74). McGowan is in the approximate location of Station Camp, approximately 4.0 km (2.5 mi) west of the Dismal Nitch.

The cannery in which Megler became a partner was not McGowan's but a plant constructed in 1870 or 1871 that was operated by Ellis (first name unknown), Thomas S. Jewett, and Jacob S. Chambers, salmon cannery owners who were also taking advantage of Chinookville's location at one of the best seining grounds on the Columbia River. This was the first salmon cannery in Pacific County, since McGowan did not can his salmon at the time, he packed it in salt barrels until the 1880s. Megler, Jewett, and Chambers purchased the cannery property from Andrew Wirt in 1872, according to Pacific County deed records. Megler soon decided this location was not a good shipping point, and in 1873 he built a cannery upriver at Brookfield, about ten miles west of Cathlamet. Here he used his business acumen and capital along with his tinsmithing skills to create a thriving canning operation (Appelo 1966:3-7).

In conjunction with his cannery at Brookfield, Joseph Megler operated a fish receiving station on the east side of Point Ellice, in Megler Cove (Figures 6 through 8). Megler leased the land for the receiving station from the owner of a mill in Knappton in 1881 for \$125.00 a year, with an option for a five-year leasing period. According to the 1881 lease-agreement record, the land was "...lying and being in the West half of Section 24, T. 9 N., R. 10 W. together with all buildings, wharves and improvements including all water rights." The property is referenced by different names in various sources, and it is described in the lease as having the name of Todd's Bay Station (Appelo 1966:14). Todd's Bay was named for the ship Isaac Todd, which had sailed during an 1814 expedition to Fort George (Astoria). The location corresponds to a bay depicted as Todd's Bay on an 1846 map of the lower river (Vavasour 1846).

An informant writing about the fishing station in Megler Cove noted that "the place known as Megler was a fishing station built by Marshall Kenney (of Astoria) in 1880 and was taken over by Megler in 1883. This he always called Hungry Harbor, so named from it being a thoroughly landlocked piece of deep water and the fishermen used to run in there out of the wind to cook their coffee and eat their lunch" (Appelo 1966:14 [fn #14]). It is unknown how long Megler operated this fishing station. Hungry Harbor today is on the east side of present Megler (Figure 1), but this may be a discrepancy in name in the 1910 quote, not in the location of the fish-buying station. The station was located in today's Megler Cove, also once known as Todd's Bay.

The Megler buying station was also called the Point Ellis (Ellice) Buying Station, and it was used to supplement the supply of fish for the Megler cannery at Brookfield. Megler also owned property and a fish-buying station on the waterfront at Astoria. These receiving stations were more convenient for the fishers to turn in their catches at the lower points in the river (J. G. Megler Papers, ca. 1930, Carruthers Collection, on file, Columbia River Maritime Museum, Astoria). Buildings on piers at the Megler or Point Ellis Buying Station remained until the 1950s, although it is unknown if they date back to the 1880s. Information on the use and operation of this area as a fish receiving station into the twentieth century is sparse, although gillnetters, fish traps, and buildings are shown in historical photographs (Figure 8).

The Northshore Cannery was a fish processing facility that was located approximately 1.6 km (1 mi) northeast of Dismal Nitch, in today's Hungry Harbor. Northshore was established as a cannery, but it became a fish receiving station sometime before 1930. At the receiving facility buildings, fishermen could moor their boats and stay in the bunkhouses that served almost as a second home. Today, only pilings remain of the Northshore station (Gunderson 2005:18-19).

The Railroad That Ran by the Tide

On the Long Beach Peninsula, the 1860s and 1870s marked a boom in the oyster business. Native oysters were shipped by schooner to San Francisco, as were salmon and crab. In 1874, the Ilwaco Wharf Company, under the supervision of Lewis Alfred Loomis, built a wharf in Ilwaco to handle the increasing business. During the 1870s, the Ilwaco Steam Navigation Company routed mail vessels and carried passengers, oyster shipments, and military supplies by day. At night, log rafts were towed to sawmills in Astoria. Loomis soon perceived the necessity of an overland connection between Ilwaco and the towns of the Long Beach Peninsula to the north, and in 1882 he negotiated the establishment of a rail line from Ilwaco toward Oysterville (Feagans 1972).

In 1888, the Ilwaco Railroad and Navigation Company (IR&N) laid the first five miles of narrow-gauge track from Ilwaco toward Long Beach and Nahcotta. The next year, a daily mixed train was established to carry freight and passengers between Ilwaco and Nahcotta. By the 1890s, a boat from Portland brought 300 vacationers to the Long Beach Peninsula twice per week. However, steamers could only reach Ilwaco at high tide because of the increasing silt in Baker's Bay, and because of the railroad's restricted schedule it was dubbed "the railroad that ran by the tide" (Feagans 1972).

In 1906, the IR&N was purchased by the Oregon Railroad and Navigation Company (OR&N). Because of the irregularity with which steamers were able to reach Ilwaco, plans were made to extend the railroad to a deep-water port along the north shore of the Columbia River. That year, the OR&N bought the deep-water site at Megler, which they initially called "Cook's Station" (Weathers 1989).

By 1907, construction of a railroad between Cook's Station and Ilwaco was under way (Feagans 1972). A new company, the Ilwaco Railroad, was established to take over the construction project. In March, an estimated 400 to 500 laborers and 14 engineers were working on the railroad extension. In the places where the railroad ran along the shoreline, a rough grade was established 18 inches above the tidal flats, and rails were laid hastily upon it to carry construction cars laden with fill from cuts made in the nearby hillsides (Feagans 1972:55). In October of 1907, construction began at Cook's Station on a wharf that measured 900 feet long and 120 feet wide (Feagans 1972:58). By the time the train and ferry freight dock began operating in June of 1908, the name of the site had changed to Megler Station (Figures 8 and 9).

Once the train began regular operation, the steamer *Nahcotta* was set up as a passenger ferry service between Astoria and Megler (Feagans 1972). The Ilwaco Railroad bought several steam locomotives, and by the time the last one was delivered they had abandoned their dock in Ilwaco. Railroad hands built a small spur at Megler to receive this locomotive from the steamer (Feagans 1972:59). For the first few months of operation, a temporary tank stored oil near the Megler dock. By 1909, a large, permanent steel tank was erected on a trestle-like structure at the site (Feagans 1972:59). In addition to the large dock, railroad spur, and oil tank, a depot, train shed, and turntable were also built at the Megler terminal (Jessett 1988:19). The dock and depot were near the eastern end of the present-day Megler SRA (Figures 10 through 13).

The dock at Megler, probably the largest on the Columbia, was at its most spectacular at night, for it was illuminated by electric lights. Passengers disembarked from the steamers via special ramps designed to speed them off, and a modern 120x60 foot depot made waiting convenient. The trains came straight off the wharf as they headed west toward the peninsula, passing a long

siding and engine facilities. The four miles of track from Megler to McGowan were by far the costliest to build but were also the most scenic. A shelf had been blasted out of an almost perpendicular cliff to form a roadbed along the river (Feagans 1972:62).

Each day, three trains carried passengers between Megler and Ilwaco, and a fourth train was used when needed. Only two daily trains were needed in the winter months. A freight train also ran each day except Sundays. The reliable train schedule caused the region's logging business to boom (Feagans 1972).

In 1909, landslides destroyed 1,100 feet of track at Point Ellice. The tracks were quickly rebuilt. Later that year, a lawsuit arose over fish traps that P. J. McGowan and Sons Cannery had constructed in such a way that they nearly blocked navigation to the Megler dock. The lawsuit involved the Columbia River pilots and eventually facilitated the removal of the fish traps (Feagans 1972:67). Another dispute arose when State Fish Commissioner J. L. Riseland claimed that water drained off from the fuel tanks at Megler contained oil which killed off fish at a nearby hatchery. The Ilwaco Railroad denied the accusations, and the matter was eventually dropped.

In 1910, all Union Pacific Railroad (UP) subsidiaries, including the Ilwaco Railroad, were merged into the Oregon-Washington Railroad and Navigation Company (Feagans 1972:69). Also in that year, the steamer *T.J. Potter* (Figure 10) was refurbished and used to carry passengers directly from Portland to Megler (Feagans 1972). The number of visitors to Pacific County increased dramatically, peaking in 1913. That year, 26,000 tickets were sold to passengers traveling between Portland and the Long Beach Peninsula, and 69,000 tickets were sold to local passengers (Feagans 1972:76). Meanwhile, large quantities of canned salmon were being shipped from Chinook and Ilwaco to Megler for trans-shipment to the east.

After 1913, however, railroad business began to decline. In 1916, the *T.J. Potter* was condemned, and it was decided not to replace her, as demand for service from Portland had diminished (Feagans 1972:80-81). Gradually, as the number of automobiles increased, the need for the railroad declined. The Ilwaco Railroad discontinued service in September of 1930, and in 1931 the Washington State Highway Department acquired title to most of the railroad right-of-way (Jesett 1988:26).

The Ferry Era

In 1921, increased automobile traffic in the region induced Fritz Elfving to establish a car ferry, the *Tourist I*, between Astoria and McGowan under the Astoria-McGowan Ferry Company. The venture was subsidized by Pacific County to the tune of \$400 per year, and the County constructed a road between Chinook and McGowan to encourage automobile drivers to use the ferry (Feagans 1972:83). The ferry dock at McGowan was used for only three years, after which time Elfving constructed a new dock on Point Ellice, approximately where the Astoria-Megler Bridge is today (Averill 1966).

Seeing Elfving's success, the UP formally announced plans to build its own automobile ferry in 1926. By that time, the UP was losing money on both the railroad and the passenger steamer *Nahcotta* (Feagans 1972:87). In January 1927, the UP contracted Gilpin Construction Company to build a road between Point Ellice and Megler. Construction of the road began three months later. The narrow-gauge railroad track was removed (and later reinstalled), and the project involved nearly as much rock work as had the extension of the railroad in 1907 because the narrow rock shelf along the river needed widening for use by cars (Feagans 1972:107). The UP contracted H. Makela & Sons to build the ferry slips at both Megler and

Astoria. The slips were built mostly on pilings (Feagans 1972:92). The ferry opened in 1927, when the UP christened and launched the *North Beach*. Cars were loaded onto the *North Beach* at the bow and were turned around by means of a turntable in order to unload (Feagans 1972:92).

Competition for ferry passengers was fierce, since profit depended on summer business, of which there was not enough to keep two ferries operating. The UP advertised heavily in travel folders and newspapers, but Elfving relied on the fact that motorists had to drive an extra mile if they took the UP ferry at Megler (Feagans 1972:92). Both the UP and Elfving lost money, and in September of 1930 the UP discontinued their ferry service.

In 1931, Captain Cal Stewart organized the Columbia Transportation Company, purchased the *North Beach*, and resumed the ferry operation at Megler. The company bought lands adjacent to Elfving's ferry dock at Point Ellice, and one night drove piles around it so that Elfving could not land his ferry. Popular stories of the incident report that Elfving rammed his ferry through the piles at full speed, scattering the pilings and alarming his passengers. Later, Elfving posted men to block traffic and potential passengers away from the *North Beach* dock (Leahy 2005:7).

In 1933, Elfving put an end to the "ferry wars" when he bought up the mortgage on the *North Beach*. By this time, Elfving had also purchased the third member of his fleet, the *Tourist III*, and did not use the newly acquired *North Beach*. In the winter of 1933, a fierce storm destroyed the dock at Point Ellice, and Elfving moved his operation to Megler, where the landing was sheltered and the ferry route to Astoria more direct (Feagans 1972:95). Figures 14 through 16 show the ferry operations at Megler between 1939 and 1948. Elfving's ferry operation eventually included a café, a ticket office, a caretaker's residence, and other buildings (Figure 17).

Elfving used *Tourist II* and *III* until the outbreak of World War II, when he sold the *Tourist II* to the U.S. Army, who painted her gray, renamed her *Octopus*, and used her for planting mines at the mouth of the Columbia River (Feagans 1972:95). In 1946, Elfving retired. He sold his boats to Merle Chessman, who quickly resold them to the Oregon Highway Department (OHD). The OHD contracted a private company to maintain the ferry service, which no longer operated at a profit. The OHD subsidized the ferries, cutting fares to keep business. The OHD operated the ferry service until the Astoria-Megler Bridge was completed (Figures 18 through 26).

In 1956, State Route 12B was constructed east of Megler (Figures 18 through 20), where there had been a gap in the highway between Megler and Knappton (McDonald 1966). The route was later redesignated SR 401. By 1961, the western end of the project area had been greatly expanded by the addition of fill (Compare Figures 14, 19, and 25) which covered a portion of the pilings remaining from the nineteenth-century fish receiving station. Construction of the Astoria-Megler Bridge began in 1962. The bridge was finished in 1966, and the last ferry run occurred in July of that year.

The Megler Safety Rest Area

In 1968 and 1969, the Washington Department of Highways (later renamed Washington Department of Transportation) demolished the ferry landing and constructed the Megler Rest Area in its place. The project involved grading, draining, surfacing, constructing a rest room/information building, and installing electrical service, a water supply system, a sewage disposal system, signs, and illumination (Contract 8513 files, letter from Kenneth A. Flynn to R. L. Carroll, July 18, 1969. Washington Department of Transportation, Olympia,

Washington). The Highway Department contracted Willamette Western Corporation to remove the pilings at the ferry slip, which was located at the eastern end of the current APE. Additional pilings, probably belonging to the old railroad dock, were removed east of the ferry slip in 1968; the Inspector's Daily Report (Contract 8513 files, Inspectors Daily Report 1968 [Book 1 Misc], pg 3. Kenneth A. Flynn, Project Engineer. Washington Department of Transportation, Olympia, Washington) notes that "most of the piles removed today were outside of the removal area to the east. The supt. agreed to do this in return for the steel I-beams." Additional entries describe the almost daily removal of pilings at the ferry slip between October 1968 and January 1969. None of the contract documents indicate that pilings were removed at the western end of the project area.

During construction of the SRA in 1968-1969, the existing embankment was extended to the south with imported fill, and it was stipulated that the top 0.3 m (1 ft) of sediment would be topsoil sufficient for growing plant life. A total of 2,004 tons of heavy, loose rip rap was laid along the bank to protect it from erosion (Contract 8513 files, letter from C. G. Prah to H. W. Humphres, February 17, 1969, Washington Department of Transportation, Olympia, Washington). Figure 14 shows the approximate current shoreline (Figure 27) in relation to the shoreline at the time when the ferry was in operation. Since 1969, a number of minor improvements have been made to the SRA, but no major changes have been made.

ARCHIVAL RESEARCH AND RESULTS OF PREVIOUS INVESTIGATIONS

Records from the Washington Department of Archaeology and Historic Preservation were reviewed to determine if archaeological sites had been recorded or if archaeological surveys had been conducted within the vicinity of the proposed project area. GLO maps were reviewed to determine if historic-period structures or features were present within the proposed project area. Historical maps and published secondary sources, on file at AINW, were also reviewed. A review of the NRHP was conducted to determine if any listed historic properties are within or near the proposed project area, and the results indicated that no historic properties are present. Archival research and information from several original sources, as outlined below and acknowledged at the close of this report, provided exceptional information about the history and archaeological potential of the project area.

Previous Investigations

No archaeological surveys have been conducted within 1.6 km (1.0 mi) of the project area. The nearest archaeological sites are 45PC4, 45PC25, and 45PC56H, each located on the western side of Point Ellice, approximately 2.0 km (1.25 mi) southwest of the current project area. Site 45PC25 is the village site of *Qailltsiuk* (at Chinookville), and site 45PC4 is an associated cemetery (Smith and Hudziak 1948). The sites were first recorded in 1948 (Smith and Hudziak 1948), and at that time much of the area had been disturbed by logging and by construction of the road along the shoreline. The cemetery is protected and maintained by members of the Chinook Nation (Tarabochia 1995).

Site 45PC56H represents the place where Captain Robert Gray landed in 1792. Gray's ship, the *Columbia Rediva*, anchored off the shore near this location. Although not an archaeological site (no artifacts were observed), the site is distinguished with a state marker (Johnson 1969).

Two miles northeast of the Dismal Nitch is site 45PC64H, the Columbia River Quarantine Station near Knappton. A cannery was built on the property in 1876, and in 1899 the United States government bought the cannery and converted it into a quarantine station

for U.S. immigrants. The station operated between 1906 and 1938 and was partially demolished in the 1970s (Weathers 1979).

Archival Research

The earliest map to show the project area in detail is Lewis and Clark's 1805 sketch (Figure 5), which shows the Dismal Nitch protected by a small point of land curling out into the Columbia River (Thwaites 1905:32-3). Subsequent maps (Belcher 1839; De Mofras 1844; McArthur and Barlett 1851; Vavasour 1846; Wilkes 1841) depict Point Ellice but do not show Megler Cove as anything more than a slight bump in the shoreline.

The 1859 GLO map of Township 9 North, Range 10 West shows no DLCs within the current project area. The surveyor's meander line generally follows the contour of the modern shoreline, but because the meander line was defined by straight survey lines, the cove is not shown in detail. The 1863 GLO map of the township shows no DLCs within the current project area; McGowan's DCL (No. 38) is shown approximately 3.2 km (2 mi) west of the project area. The 1890 and 1896 GLO maps of the township show the project area approximately 0.8 km (0.5 mi) east of Washington Hall's claim. The project area itself was never associated with any DLC, and the meander lines on the GLO maps show only a generalized shoreline.

After Lewis and Clark's 1805 map, Megler Cove was not depicted again in detail until the U.S. Coast and Geodetic Survey (USCGS) began creating maps of the Columbia River's north shore in 1870. The 1870 USCGS map showed Megler Cove at the mouth of Megler Creek, protected by a long, unbroken ridge extending south/southwest into the river slightly east of Megler Creek. The steep southeast side of the ridge descended dramatically into the water. On the northwest side of the ridge, the relatively steep cliffs on three sides of the cove protected it from the open water to the south. The project area is shown the same on the 1885, 1890, 1895, 1903, and 1905 maps as it is on the 1870 map. On the 1910 map, the landform is depicted exactly as before; however, a dock is shown extending south from Megler Cove in that year. The dock shown on the map is in roughly the same configuration as the westernmost alignment of pilings in the cove today. Records indicate that docks were built in the cove by the early 1880s, and a ca. 1897 photograph (Figure 6) shows a large dock in place by that date, along with a structure likely associated with the fish receiving station. A photograph (Figure 7) was taken in the same location by AINW in September 2005, showing some of the pilings remaining of the outrack and runway.

In October 1908, a timber cruise was conducted in Section 24 of Township 9 North, Range 10 West. By this time, the railroad and depot had been constructed at Megler, and the timber cruiser (J. C. Fugate) noted that "being near the railroad and along the waterfront this land is valued at \$25.00 per acre." With plans to log the area, Fugate also stated that "this timber can be handled down the creeks [Megler Creek] in the NW ¼ to the Columbia River. Timber can be moved with one engine" (Timber Cruise for Pacific County, Washington, Section 24, Township 9 North, Range 10 West, J. C. Fugate, October 1 and 2, 1908. Washington State Archives, Olympia, Washington).

A photograph (Figure 8) taken of Megler Cove from Point Ellice sometime between 1907 and 1927 shows that much of the land north of Megler had been logged by that time. The fish receiving station was still in operation, as evidenced by the many fishing boats, docks, and associated structures in Megler Cove. The photograph shows the Megler depot in the background to the right, and the cutting and filling operations associated with construction of the railroad are evident along the shoreline. Near the center of the photograph, in the background, a large cut in the hillside indicates where the south/southwest-trending ridge was truncated during construction of the railroad in 1907. The end of this ridge, which has been

dramatically altered, would have formed the “nitch” within which Lewis and Clark camped in 1805.

A 1916 right-of-way and track map (Figure 9) for the Oregon-Washington Railroad and Navigation Company shows the railroad tracks hugging the shoreline and continuing northeast onto the dock at Megler, which jutted out from the shoreline on pilings into the Columbia River. Figures 10 through 13 show the Megler terminal at about this time, between 1907 and 1927. The 1916 map clearly shows the eastern extent of the landform, although the right-of-way continued into the water and followed the shoreline to the north and east. The train depot building was situated on the dock, and just north of the dock, on the edge of the shoreline, was Tank No. 2, a 5,000-gallon oil tank. Oil barges landed on the south side of the dock, and a pipe carried oil to Tank No. 2 as well as to Tank No. 1 to the west. Water was piped from a separate 5,000-gallon tank into the depot building on the dock. At the western end of terminal was a one-stall engine house. The landform depicted on the 1916 map is much different than the modern landform, particularly at the western end. The filled bench in the hillside on which the railroad sat was very narrow in 1916, and a small point of land on the map (near the western edge of the paved portion of today’s SRA) indicates where the ridge was truncated during railroad construction in 1907.

The 1918 (reprinted in 1924) *Fort Columbia, Wash.-Oreg.* USGS topographic quadrangle shows the Megler train dock extending east/northeast into the Columbia River. Near the western end of the project area, outside the western boundary of the APE, four structures are shown immediately west of Megler Creek at its confluence with the Columbia River. No further information could be found regarding these structures, and they are not shown on any other maps, although some structures may faintly be seen in a 1939 aerial photograph (Figure 14). The 1919 (reprinted in 1928 and 1936) *Astoria, Oreg.-Wash.* topographic quadrangle shows one dock in Megler Cove, in approximately the same configuration as the pilings in the cove today.

By 1936, the road from Point Ellice to Megler had been built, the railroad line had been abandoned, and the ferry had begun operation. The 1936 Metsker map of Township 9 North, Range 10 West, shows the road from Point Ellice ending at Megler. A tank is shown at the end of the abandoned railroad dock, jutting out into the river at the eastern end of the project area. At the western end of the project area, the fish receiving station dock in Megler Cove shown on the 1918 quadrangle is also shown on the 1936 map. The project area is shown nearly identically on the 1941 and 1950 Metsker maps, the only difference being the labeling of the “Ferry to Astoria” in 1941 and actual representation of the ferry slip in 1950.

A series of aerial photographs taken by the United States Army Corps of Engineers (USACE) show the project area in detail at various times between 1939 and 2001. The 1939 USACE aerial photograph (Figure 14) shows the remnants of the abandoned railroad dock at the eastern end of the project area. By this time, Elfvig’s ferry operation at Megler was underway, and the ferry landing and associated structures are shown on the 1939 map. The ticket office and cafe are shown at the edge of the shoreline at the ferry dock, and a residence and another structure are shown across the road to the north. The road from Megler to Point Ellice followed the shoreline on a narrow shelf cut out of the hillside and built-up by fill. At the western end of the project area, the exposed rock hillside indicates where the south/southwest-trending ridge was truncated. Further to the west, the full extent of the pilings in Megler Cove are shown, although the docks may have been largely abandoned by this time. One small structure, probably associated with the old fish receiving station, is shown on the easternmost set of pilings, and two structures are shown on pilings to the west. To the northeast, downed trees and cleared vegetation along Megler Creek and along the access road to the proposed well site farther to the west indicate logging activity. A short logging road is also shown extending north up Megler Creek from the main road along the shoreline.

The 1944 USACE aerial photograph (Figure 15), taken at low tide, shows that a portion of the abandoned railroad dock had disappeared between 1939 and 1944. The photograph also shows that some of the vegetation along Megler Creek and the nearby hillsides had grown back following the earlier logging activity. One of the structures on the pilings in Megler Cove had also disappeared by 1944. The 1948 USACE aerial photograph (Figure 16), probably taken at high tide, shows the project area had changed little between 1944 and 1948, aside from the fact that the square structure on pilings in Megler Cove had been replaced by a slightly larger, rectangular structure.

The 1949 *Knappton, Wash.-Oreg.* 7.5-minute topographic quadrangle shows the ferry dock and abandoned railroad dock at Megler, and the road extending from Megler to Point Ellice. No structures are shown in or near the project area. The 1949 *Astoria, Oreg.-Wash.* 7.5-minute quadrangle shows the dock and nearby pilings in Megler Cove, but no structures in or near the project area at its western end.

A 1955 aerial photograph, curated at the Pacific County Historical Society in South Bend, shows that most of the old railroad dock had been demolished by 1955. In addition, a small dock and shed had been constructed near the western end of the project area, where the western edge of the paved portion of the SRA is today. A ca. 1927-1956 photograph (Figure 17) of the ferry landing, curated at the Clatsop County Heritage Museum, shows the dock and at least two buildings built on pilings near the dock. Additional buildings are shown in the background. These buildings were demolished and the landform was expanded to the south in 1956, when the highway was extended between Megler and Knappton.

A 1956 Washington State Department of Highways map (Figure 18) shows the highway right-of-way and ferry operations immediately prior to the extension of the highway east between Megler and Knappton in that year. A large portion of the original ferry landing, which had been built on pilings, was demolished and replaced, and the landform was broadened to make room for more parking. The map shows a rock crib protecting the dock and shoreline and three linear alignments of pilings creating the ferry landing. One structure, the café and ticket window, is shown at the entrance to the dock, and six additional buildings, including the caretaker's residence, are shown on the north side of the road. The middle portion of the project area was at that time a parking lot for waiting automobiles in 1956, labeled on the map as "On Ferry Storage." The small dock and shed are again shown at the western end of the parking lot, along with a triangular supply building and a wood shed. West of the wood shed is an area labeled "Store and Living Quarters," but no structure is shown on this map or on any of the aerial photographs, suggesting that this building may have never been built. The 1956 map also shows Chinook Telephone Company telephone poles inside the highway right-of-way in the northwest corner of project area, providing telephone service for the ferry operation.

A 1957 USACE aerial photograph (Figure 19) shows the new highway extending between Megler and Knappton to the east. Between Megler and Hungry Harbor, the highway is shown on a narrow strip of imported fill, which impounded water from the river. (It was in the then-unnamed cove to the east that Lewis and Clark spent the nights of November 10th and 11th, 1805, before arriving at the Dismal Nitch.) Extensive cuts in the hillside above the project area, particularly at the western end, indicate that this ridge was once again cut in the mid-1950s during construction of the highway extension. In the area of the proposed drain field, the caretaker's residence and associated outbuildings are shown as they were in 1955; however, the area adjacent northeast of the caretaker's residence is shown as filled-in in the 1957 photograph, whereas before it had been open water.

An oblique aerial photograph (Figure 20), curated at the Ilwaco Heritage Museum, shows the project area sometime between 1956 and 1961. At the right of the photograph is the

caretaker's residence, a smaller outbuilding, and another associated building; these buildings are in the approximate location as the proposed drainfield. Pilings remaining from the old railroad dock are evident in the foreground at the right of the photograph. The ferry landing in the center of the photograph consists of the short dock, three main alignments of pilings, a café, and a small ticket office. Behind the café (to the left) is the large parking lot, and behind the parking lot, in the background to the left of the photograph, can be seen pilings from the old docks in Megler Cove. This photograph shows how the cliff face had been cut back and the tongue of land created for, first, the railroad and then the ferry landing. Figures 21 through 24 show the ferry landing at about this time.

A 1961 USACE aerial photograph (Figure 25) shows that the western portion of the project area changed drastically between 1957 and 1961. A large mass of land that was not present in 1957 is shown in 1961 as an accretion on the western end of the previous landform. The 1961 photograph shows the new land covering an area of pilings that had been visible in previous aerial photographs, most likely enveloping the pilings. While it has been the policy of WSDOT to remove pilings prior to filling (Penny Halger, personal communication 2005), there is no evidence that this was done in this case. The 1961 photograph does not show any major changes to the ferry operation, but the wood shed at the western end of the parking lot was still standing, and a line of cars is shown waiting to load onto the ferry.

A 1966 USACE aerial photograph (Figure 26) shows that the project area experienced few changes between 1961 and 1966. The photograph shows that some of the vegetation on the hillsides had grown back, and that the road up Megler Creek had been extended. The wood shed at the western end of the project area had been demolished by this time. The area immediately northeast of the proposed drain field may have received more fill, and only a small stream indicated the location of the large, impounded pond upstream.

A 2001 USACE aerial photograph (Figure 27) shows the project area similar to how it looks today. Evidence of the earlier ferry operation was entirely gone by that time, replaced by the SRA parking lot and restroom building. West of the paved portion of the SRA, the accreted portion of the landform is shown mostly covered in trees, brush, and blackberry brambles. Much of the vegetation on the surrounding hillsides had grown back by this time. Only partially visible in the 2001 photograph, probably because of the photograph's scale, are the remaining pilings in Megler Cove.

In summary, historic records, maps, and aerial photographs provide a relatively detailed chronology of activities in and near the project APE between 1880 and 2005. The natural landform that William Clark described in 1805 has been dramatically altered, as the ridge was cut during later construction activities. Docks associated with a fish receiving station were built in Megler Cove by the 1880s, and the remaining pilings from these docks are evidence of the fishing industry. The landform on which the Clark's Dismal Nitch SRA sits is entirely artificial, created partially in 1907 during construction of the railroad and terminal at Megler. The landform was broadened in 1927 during construction of the road between Megler and Point Ellice and construction of the ferry operations at Megler in the same year. Later cutting and filling of the surrounding hillsides occurred when the highway was built between Megler and Knappton in 1956. Between 1957 and 1961, filling was done at the western end of the project area. The ferry was discontinued in 1966 when the Astoria-Megler Bridge was completed, and the Washington State Department of Highways demolished the ferry landing, removed the associated pilings, and extended the embankment towards the Columbia River in 1968 and 1969 when it created the current rest area.

FIELD INVESTIGATIONS

On August 25, 2005, AINW Senior Archaeologist Jo Reese, M.A., R.P.A.; Senior Archaeologist and Architectural Historian Judith Chapman, M.A.; and Supervising Archaeologist Nicholas Smits, M.A., R.P.A.; conducted an informal walk-over of the Clark's Dismal Nitch SRA and proposed drain field area during the Master Plan kick-off meeting. The three AINW archaeologists photographed the project APE, inspected visible areas, and noted the presence of pilings at the western end of the SRA. No other cultural resources were identified.

On September 15, 2005, Ms. Chapman and Mr. Smits briefly visited the Clark's Dismal Nitch project area while conducting research in nearby Astoria and Ilwaco. The two archaeologists performed an informal walk-over of the SRA and took additional photographs of the project area. No cultural resources within the project APE were identified.

On October 12 and 13, 2005, AINW archaeologists Morgan Frazier, B.A.; Paul Harris, B.S.; Mini Sharma, M.S., and Mr. Smits conducted a formal pedestrian survey and shovel testing of the Clark's Dismal Nitch APE. The SRA was surveyed by walking southwest/northeast transects spaced approximately 3 m (10 ft) apart. At the time of the survey, the majority of the SRA was paved for vehicle access and parking (Figures 28 and 29). The eastern end of the SRA (Figure 30) consisted of a manicured lawn; the existing septic drain field was located within a narrow strip of lawn oriented east/west between SR 401 and the parking lot in the northeastern portion of the SRA. The concrete restroom/information building, constructed in 1969, stood near the center of the SRA, and the southern edge of the property was lined with a row of Sitka spruce, oak, and bigleaf maple trees (Figure 31). The portion of the riverbank within the SRA was protected with rip rap and lined with a chain-link fence to inhibit visitor access to the water. Because of the pavement and vegetation, mineral soil visibility within the developed portion of the SRA was approximately 0 to 5%.

Immediately west of the paved portion of the SRA was an undeveloped portion of the same flat landform, covered in blackberry brambles, and Douglas-fir, oak, bigleaf maple, and Sitka spruce trees. A short gravel road, which had been blocked off at its entrance by concrete dividers, extended southwest into this undeveloped portion of the SRA. Modern trash was found throughout this brushy portion of the SRA. Mineral soil visibility was approximately 0 to 5% due to the dense vegetation and modern trash. The southern shoreline at the western end of the landform was protected with rip rap at the base of the river bank, but the shoreline comprising Megler Cove was not rip-rapped and consisted of a mudflat during low tide (Figure 32). Approximately 0.6 to 1.5 m (2 to 5 ft) of the landform's vertical profile was exposed on the western and southern shorelines in this portion of the project area (Figure 33). The sediment observed in the profile consisted entirely of loose fill and contained large angular cobbles.

Two separate sets of pilings (Figures 14 and 25) related to the historic-period fish receiving station were observed in Megler Cove. The set closest to the project APE, located southwest of the western end of the project area, consisted of a series of rows of pilings oriented approximately east/west and two narrow alignments of pilings connecting these rows to the shoreline to the north (Figures 6, 7, and 32). Historic photographs show that before 1961, two walkways extended north from the rows of pilings in the river and converged near the mouth of Megler Creek, their alignments forming a "V" shape (Figures 14 and 25). The pilings observed today extending into the mudflat represent the westernmost of the two walkways (Figures 7 and 25). The modern landform, which was created sometime between 1957 and 1961, now covers the location where the second walkway (the eastern leg of the V) had been. Two pilings belonging to this second, easternmost walkway were observed in the

mudflat in Megler Cove and are shown on Figure 3. No other pilings related to this walkway were observed within the APE, as this location is now covered in fill.

A second set of pilings was observed approximately 30 m (100 ft) west of the first set of pilings, outside of the project APE (Figure 25). Also related to the historic-period fish receiving station, this set of pilings consisted of several rows of pilings oriented northeast/southwest and a walkway that extended northwest to the shoreline west of Megler Cove (Figure 34).

The proposed well and its associated pipeline and the proposed drain field are outside the SRA but are included in the project APE (Figures 1 and 2). Ms. Sharma and Mr. Harris surveyed the proposed well location using transects spaced 1 m (3 ft) apart. The proposed well location is in a small (3-m [10-ft] diameter), flat area on the north end of a northeast-trending ridge up an unnamed stream that reaches the Columbia River to the west of Megler Creek (Figure 35). The vegetation in the vicinity of the proposed well had been cleared before the survey; however, much of the well location was covered in scattered gravel because of its proximity to the gravel access road. Mineral soil visibility within the proposed well location was approximately 50%. The gravel access road, beneath which a new water line will be installed for a distance of approximately 250 m (825 ft), was walked by Ms. Sharma and Mr. Harris between the well location and SR 401. No cultural materials were observed, nor were any high probability areas for archaeological resources identified.

The drain field is proposed to be placed on the opposite side of SR 410 from the SRA at its eastern end, in the area where the historical research indicated there has been buildings. The area proposed for the drain field was approximately 136x15 m (450x50 ft). Ms. Sharma, Mr. Harris, Ms. Frazier, and Mr. Smits surveyed the proposed septic drain field using transects spaced 3 m (10 ft) apart. At the time of the survey, the drain field area was covered in short grass, and scattered crushed road gravel was observed on the ground surface. Mineral soil visibility was approximately 5%. Sitka spruce, Douglas-fir, bigleaf maple, and oak trees lined the northwest edge of the drain field area at the base of the steep cliffs.

Due to the limited ground surface visibility throughout the SRA and proposed drain field APE, 13 shovel tests were excavated to determine the presence or absence of buried archaeological deposits (Figure 36). The shovel tests (Figures 37 and 38) were 50 centimeters (cm) (20 inches [in]) in diameter at the surface, slightly conical in shape, and all except one (ST-12) (Figure 39) were excavated to a depth of 50 cm (20 in) below the surface. Soil was screened through 3-millimeter (mm) (1/8-in) and 6-mm (1/4-in) mesh hardware cloth and was replaced in the hole when the test was completed. The locations of shovel tests were mapped relative to features of the surrounding landscape and the nearby highway. The single artifact found in one of the shovel tests (ST-11) was not collected but was described and photographed (Figure 40). After documentation, the artifact was placed in a plastic bag with a tag providing provenience information and was replaced in the hole before it was refilled with soil.

North of SR 401, ST-1 through ST-7 were excavated in the proposed drain field area, in and near the former location of the ferry caretaker's residence (Figure 37). In each of the shovel tests, the upper 10 cm (4 in) of sediment consisted of light brown silt loam with approximately 15% crushed angular road gravel. Between 10 and 50 cm (4 and 20 in) below the ground surface was a compact layer of mottled brown, gray, and tan silty clay fill, containing approximately 50% angular gravel and large and small angular and sub-rounded cobbles. This layer of fill was densely packed, and a steel breaker bar was needed to extend the shovel tests to 50 cm (20 in) below the ground surface. No artifacts were found in ST-1 through ST-7.

South of SR 401, ST-8 and ST-9 were excavated in the manicured lawn at the east end of the SRA (Figure 38). In ST-8, the upper 17 cm (7 in) of sediment consisted of light brown silt loam with less than 1% gravel content. One modern, colorless glass fragment and one aluminum pull tab fragment from a modern beer can were found in the upper 17 cm (7 in) of excavation. An extremely compact layer of mottled brown, gray, and tan silty clay fill with 50% gravel was observed between 18 and 50 cm (7 and 20 in) below the surface. In ST-9, the light brown silt loam extended to a depth of only 10 cm (4 in) below the surface, and the same mottled gravel layer was observed between 10 and 50 cm (4 and 20 in) below the surface. No cultural materials were observed in ST-9.

ST-10 through ST-13 were excavated in the undeveloped area at the western end of the SRA (Figure 39). In this area, no silt loam topsoil was encountered; rather, the mottled, compact gravel fill with angular cobbles was observed between the ground surface and 50 cm (20 in) below the surface. As was the case in the previous shovel tests, a breaker bar was needed in order to extend the shovel tests to 50 cm (20 in) below the surface. One fragment of whiteware ceramic (Figure 40), which had no datable characteristic except that whiteware is common in late-nineteenth- and early-twentieth-century archaeological sites, was found in the fill of ST-11 at a depth of approximately 30 cm (12 in) below the surface. Modern red plastic fragments were also found to a depth of 45 cm (18 in) in ST-11. The artifact does not represent a historic-period deposit, as the landform was created after 1957 and the item was found in fill, overlying modern materials.

Because one possible historic-period artifact was found in ST-11, ST-12 was excavated 1 m (3 ft) to the east to determine if a subsurface archaeological deposit was present (Figure 39). No cultural materials were observed in ST-12, which was terminated at a depth of 30 cm (12 in) below the surface when solid rock was reached. No other cultural materials were identified in ST-10 through ST-13.

SUMMARY AND RECOMMENDATIONS

AINW has completed a cultural resource survey, including a literature review, a pedestrian archaeological survey, and subsurface shovel testing for the Clark's Dismal Nitch SRA Master Plan. The natural landform visited by the Lewis and Clark Expedition in 1805 has been dramatically altered. The area has been altered, starting with construction of a railroad in 1927, and subsequently modified for a ferry, a highway, and for the rest area.

A single fragment of whiteware ceramic that may date from the historic period was found associated with modern plastic fragments in one of 13 shovel tests. The single artifact does not represent an archaeological deposit.

A series of detailed historic photographs indicate that pilings related to a late-1880s fish receiving station may have been incorporated into the western end of the SRA due to filling between 1957 and 1961. Contract documents curated at the WSDOT do not indicate that pilings were removed from the western end of the project area. The visible pilings still existing in the cove remain in their historical configuration, although the structures that once occupied these foundations are absent. Since many of the associated pilings in the water are present, and the fill covering the alignment was placed prior to the time that pilings to the east (associated with the ferry landing) were removed in 1968 and 1969, it is reasonable to suspect that the pilings remain in their original alignment concealed by fill. The depth of the covering has not been determined; however, the off-shore pilings that have survived extend above the Columbia River's surface at high tide, so the tops of the land-locked pilings are probably not far below the surface. The pilings were recorded as a resource by AINW, although their presence

beneath the fill within the APE has not been verified. The archaeological site inventory form is an appendix to this report. The structures that originally sat atop the pilings are no longer present, and therefore the pilings lack integrity. While the pilings stand as testimony to the fishing industry in this area, it is unlikely that they will contribute information important to our understanding of history. The resource is recommended to be considered not eligible for listing in the NRHP. A determination of “no historic properties affected” is recommended for the project.

Should unanticipated archaeological or historical resources be encountered during project construction, all ground-disturbing activity in the vicinity of the find should be halted and the WSDOT and the SHPO should be promptly notified to assure compliance with relevant state and federal laws and regulations.

HISTORICAL RESEARCH SOURCES/ACKNOWLEDGEMENTS

AINW would like to thank the many state agencies, research centers, and individuals who assisted our research for this project. The review for previous surveys and archaeology was conducted at the Department of Archaeology and Historic Preservation in Olympia, Washington. Historical information, maps, and photographs pertaining to WSDOT’s changes to the Megler SRA in the 1950s and 1960s were provided by Penny R. Haeger, Safety Rest Area Program Planner with WSDOT.

Maps and historic aerial photographs were provided by the Portland District Office of the United States Army Corps of Engineers. Collections of the Oregon Historical Society in Portland, the Washington State Library in Tumwater, and the Southwest Regional Branch of the State Archives in Olympia also provided useful historical information.

Local historical societies and museums provided the majority of historical information included in this report. Lisa Penner, Archivist at the Clatsop County Historical Society Museum in Astoria, guided research efforts through the museum’s photograph files, newspaper articles, books, journals, and newsletters. The museum has extensive information on ferries, canneries, docks, and fishing in the area. Barbara Minard, Collections Manager, assisted by Joan Mann, Librarian, both at the Ilwaco Heritage Museum, provided numerous historical images of the project area that were very useful for documenting changes to the Dismal Nitch through the years. Jeffrey H. Smith at the Columbia River Maritime Museum allowed AINW access to historical images, charts, maps, and historical information on Joseph Megler. Bruce Weilepp, Museum Director with the Pacific County Historical Society, graciously spent time discussing the history of the area and provided valuable maps, historical images, books, and journal articles.

Jim Sayce, the Station Camp Project Coordinator for the WSHS, provided suggestions and contacts for AINW’s research. Acknowledgement is gratefully given to Hobe Kytr, former director of the Ilwaco Heritage Museum, who generously provided a long list of research sources to pursue, while also supplying historical information about the Ilwaco Railroad and names of historical maps to hunt down. Mike Herman, who is from the Megler area, provided his knowledge of the more recent history of the area. Abbie Laine is working with local author Carlton Appelo’s extensive collection of historical research materials and kindly lent her time to check for historical source material on the Megler area. David Evans and Associates, Inc. has provided its land survey recently completed of the project area. Gary Johnson, Chairman of the Chinook Indian Tribe, and Tony Johnson, Chairman of the Tribe’s Cultural Committee, both provided information about the project area and vicinity.

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